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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------|------------------|
| 10/600,309  | 06/20/2003  | Kenneth Klabunde     | 33985                     | 6076             |
| 23589 7590 03/21/2007<br>HOVEY WILLIAMS LLP<br>2405 GRAND BLVD., SUITE 400<br>KANSAS CITY, MO 64108 |             |                      | EXAMINER<br>NGUYEN, CAM N |                  |
|   |             |                      | ART UNIT<br>1754          | PAPER NUMBER     |
| SHORTENED STATUTORY PERIOD OF RESPONSE  |             | MAIL DATE            | DELIVERY MODE             |                  |
| 3 MONTHS  |             | 03/21/2007           | PAPER                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/600,309

Applicant(s)

KLABUNDE ET AL.

Examiner

Cam N. Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01/02/07 (an election and response).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-8,10,12-14,16-19,23,43,45,47,49 and 51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8,10,12-14,16-19,23,47,49 and 51 is/are allowed.
- 6) ☒ Claim(s) 1,3,5-7,43 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### Response to Amendment

1. Applicants' amendment and remarks, filed January 02, 2007, has been made of record and entered. Claims 1 & 8 have been amended. Claims 2, 4, 9, 11, 15, 20-22, 24-42, 44, 46, 48, & 50 have been canceled.

Claims 1, 3, 5-8, 10, 12-14, 16-19, 23, 43, 45, 47, 49, & 51 are currently pending.

### Response to Election of Species

2. In reply to the Election of Species requirement, applicants have elected without traverse the  $\text{Al}_2\text{O}_3$  (as the first material) and Ag (as the second material) for examination. A new office action based on the elected species follows.

### Claim Rejections - 35 USC § 102(e)

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3, 5-7, 43, & 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Park (US Pat. 6,706,660 B2), "hereinafter referred to as Park '660".

Park '660 discloses a lean NO<sub>x</sub> catalyst comprising: a substrate; a  $\gamma$ -alumina support material deposited on the substrate; a metal or metal oxide promoter selected from the group consisting of indium, gallium, tin, silver, etc. and combinations thereof, etc., the metal or metal oxide promoter is introduced into the  $\gamma$ -alumina support material deposited on the substrate; and wherein the  $\gamma$ -alumina support material has a surface area of between about 80 m<sup>2</sup>/g and 300 m<sup>2</sup>/g and an average pore size of between about 3 nm and 30 nm in diameter, and wherein the  $\gamma$ -alumina support material includes a microstructure having a plurality of short needle features with rounded edges (see col. 19, claim 1). The  $\gamma$ -alumina support has a pore volume of from about 0.5 cc/g to about 2.0 cc/g (see col. 20, claim 41).

Park '660 teaches the claimed composition having the claimed properties, thus anticipates the claims.

#### Citations

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form prepared attached.

#### Conclusion

6. Claims 1, 3, 5-8, 10, 12-14, 16-19, 23, 43, 45, 47, 49, & 51 are pending. Claims 1, 3, 5-7, 43, & 45 are rejected. Claims 8, 10, 12-14, 16-19, 23, 47, 49, & 51 are allowed.

Contacts

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M-F, 9:00 AM - 6:30 PM, at alternative work site.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cam N. Nguyen/

Nguyen/cnn

Primary Examiner

March 17, 2007

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